

REMARKS

Claims 1, 3-6, 8-27, 29-32, and 34-64 are now pending in the application with claims 3-6, 8-18, 21-26, 29-32, 34-44, and 47-64 having been previously withdrawn. Claims 19, 20, 45, and 46 are currently amended. Claims 1, 7, 27, and 33 are cancelled by this amendment. No claims are newly added. Basis for the amendments can be found throughout the specification, claims and drawings as originally filed. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

Claims 1, 7, 19, 20, 27, 33, 45, and 46 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

In the Office Action, the Examiner alleges that the specification does not support an amendment drawn to “calculating a size ratio amongst the respective transmission rates, where the size ratio is a ratio between the respective transmission rates for each of the idle radio channels.” Applicants respectfully disagrees. Paragraph [0087] of the specification states that “when the transmission rates of the respective radio channels are different, the data part of one data frame is fragmented into X at a size ratio corresponding to the transmission rates, so as to generate X data blocks having the same packet time length. For example, when two radio channels (#1 and #2) are idle and their transmission rates are 6 Mbit/s and 12 Mbit/s, respectively, the data part of one data frame is fragmented at a packet size ratio of 1:2 so as to generate two data

blocks.” As can be seen, a size ratio is determined based on the transmission rates of the idle channels #1 and #2. One having skill in the art would read this paragraph and understand that the size ratio is based on the ratio between the transmission rates. Accordingly, Applicants respectfully submit that the foregoing limitation is supported by the specification. Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li (U.S. Pub. No. 2002/0163879; “Li”) in view of Sugar (U.S. Pub. No. 2007/0263657; “Sugar”) and Lu (U.S. Pub. No. 2003/0185241; “Lu”). Claims 1 and 27 have been cancelled, thereby rendering the rejection moot, and the subject-matter thereof has been incorporated into dependant claims 19, 20, 45 and 46.

Claims 19, 20, 45, and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li in view of Sugar and Lu as applied to claims 1 and 27 above, and further in view of Terry (U.S. Pat. No. 7,046,651; “Terry”). These rejections are respectfully traversed.

Claims 19 and 20 have been amended to incorporate the limitations of base claim 1 and claims 45 and 46 have been amended to incorporate the limitations of base claim 27. As a result of the amendment, claims 19 and 45 are similar in scope and claims 20 and 46 are similar in scope.

With respect to claim 19, Applicants respectfully submit that the combination of Li, Sugar, Lu and Terry cannot be relied upon to teach “generating X new data packets

after the simultaneous transmission of the X data packets and continuously transmitting the new data packets without performing carrier sense, until a time corresponding to a transmission time of data packets generated from the one data frame passes.” The Examiner cites to Terry to teach this limitation. Terry is directed to a topology for multi-channel wireless time division duplex systems, so that channel state information may be obtained and used to optimize data transmissions. Col. 1, lines 6-8. The relevant portion cited to by the Examiner recites that DCF is based on the Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA) protocol. Col. 11, lines 11-14. The CSMA/CA protocol, however, is merely directed to performing carrier sense for a predetermined amount of time. If the channel is not busy for the predetermined amount of time, transmission is initiated. If the channel is busy, then the transmission is deferred.

On the other hand, claim 19 recites that after an initial transmission of X data packets, after carrier sense is performed, X new data packets are generated and continuously transmitted without performing carrier sense for a period of time corresponding to a transmission time of the initial X data packets. Thus, the subsequent transmissions can rely on the carrier sense performed for the previous transmission, thereby making the transmission of the X new data packets more efficient.

As discussed above, Terry does not teach this concept. Terry merely teaches performing carrier sense for a predetermined amount of time. As such, Terry cannot be relied upon to teach the foregoing limitation. It is respectfully submitted that the combination of Li, Lu, and Sugar cannot cure the deficiencies of Terry. Accordingly, claim 19 defines over the combination of references. Claim 45 defines similar subject

matter. Accordingly, Applicants respectfully submit that claims 19 and 45 patentably define over the combination of Li, Sugar, Lu and Terry. Reconsideration and withdrawal of the rejections is, therefore, respectfully requested.

With respect to claims 20 and 46, Applicants respectfully submit that claims 20 and 46 patentably define over the combination of Li, Lu, Sugar and Terry. Similar to the rejection of claims 19, the Examiner cites to Col. 11, lines 13-14 of Terry to teach a limitation of claim 20 directed to “generating and consecutively transmitting X new data packets after the simultaneous transmission of the X data packets wherein the generating and consecutively transmitting step is performed X times without performing carrier sense.” Similar to the claims discussed above, the limitations of claims 19 and 45 are directed to generating and transmitting a X data packets, X times prior to performing another carrier sense. On the other hand, the relevant portion of Terry discloses a system based on the CSMA/CA protocol. As discussed, the CSMA/CA protocol calls for performing carrier sense for a predetermined period of time before transmitting on a channel determined to be idle. Thus, the relevant portion of Terry cannot be read to teach the limitation directed to “generating and consecutively transmitting X new data packets after the simultaneous transmission of the X data packets wherein the generating and consecutively transmitting step is performed X times without performing carrier sense.” Accordingly, Applicants respectfully submit that claim 20 patentably defines over the combination of the cited references. Reconsideration and withdrawal of the rejection is respectfully requested.

Applicants respectfully submit that claim 45 recites subject matter similar to that of claim 19. Thus, for at least the reasons provided above, Applicants respectfully

submit that claim 45 also defines over the combination of references. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 7 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li in view of Sugar and Lu as applied to claims 1 and 21 above, and further in view of Kadous (U.S. Pub. No. 2005/0008092; "Kadous"). Applicant has cancelled claims 7 and 33, thereby rendering the rejection moot as to these claims.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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